

Livestock Disease Diagnostic Center

Accession: 22170-08
Report date: 5-14-08/SM
Owner: Churchill Downs(Fox Hill)
Coordinator: N. M. Williams, DVM, PhD

University of Kentucky
P.O. Box 14125
Lexington, KY 40512-4125
(859) 253-0571
FAX: (859) 255-1624

KENTUCKY RACING AUTHORITY (Acct: 482)
ATTN: NICHOLS, LAFE
4063 IRON WORKS RD
LEXINGTON, KY 40511

SUBMISSION Taken: 5-3-08
SUMMARY Received: 5-5-08

Species	Animals	Tests	Completed
Equine	1	12	12

**** FINAL REPORT ****

PATHOLOGIST'S CASE SUMMARY 5-14-08/10:07a

PRIVILEGED INFORMATION - NOT FOR PUBLICATION

ANIMAL ID: **Eight Belles**

SIGNALMENT: Breed: Thoroughbred

Sex: F Age: 3 Years

HISTORY: This filly broke down after race #10. The breakdown occurred after the finish line. There were compound fractures of both front legs. The horse was euthanized.

GROSS EXAMINATION: A gray roan Thoroughbred filly with lip tattoo I05466 was submitted for necropsy examination. The filly was in good body condition and good postmortem preservation.

External examination: This revealed compound fractures of both front legs at the level of the fetlock joints. Lacerations of the skin on the distal lateral metacarpal area were present on both front legs. The lacerations were approximately 6-8 cm in length and were the result of penetration of the skin by bone fracture fragments. There were areas of excoriation of the skin measuring 10-12 cm in diameter over the area of the right hip.

Musculoskeletal system: Upon examination of the fetlock joints of the front legs, it was noted that no joint fluid remained. This was the result of the extensive tearing of the associated soft tissues and the open nature of the fractures. Exploration of the left metacarpophalangeal joint revealed a completely displaced lateral condylar fracture of the third metacarpal bone. This fracture was vertically oriented and ended approximately 9 cm dorsally. There was rupture of the intersesamoidean ligament with a thin vertical fracture of the medial aspect of the lateral sesamoid bone. There was a 1 cm avulsion fracture of the lateral proximal condyle of the first phalanx. The right metacarpophalangeal joint had a completely displaced lateral condylar fracture of the third metacarpal bone. This fracture extended vertically 11 cm. A mid-body fracture of the medial sesamoid bone, rupture of the intersesamoidean ligament, and a small vertical fracture of the medial aspect of the lateral sesamoid bone were also present. The lateral aspect of the proximal articular surface of the first phalanx had a 1 cm avulsion fracture. There was rupture of the lateral extensor branch of the suspensory ligament. The fascia was torn and the lateral collateral sesamoidean ligament was ruptured. The lateral digital artery was severed. Examination of other bones, joints, and tendons revealed no gross lesion. There was bruising in the musculature around the first cervical vertebra and mild hemorrhage in the ventral spinal canal at the level of the first cervical vertebra. There was bruising in the musculature on the top of the head. These changes were interpreted as being secondary to falling.

Cardiovascular system: The right lateral digital artery was severed at the level of the

PATHOLOGIST'S CASE SUMMARY 5-14-08/10:07a (Continued)

fetlock joint (see above). No other significant gross lesions were observed.

Pulmonary system: The lungs were congested. Edema fluid was present in the trachea and bronchi (post euthanasia).

Alimentary system: The stomach contained a small amount of normal ingesta. The content of the small intestine and colon was essentially normal. The liver was mildly congested.

Urinary system: No significant gross lesions were observed. The urinary bladder was empty.

Endocrine system: There was an area of hemorrhage surrounding the left thyroid gland. This appeared acute and measured approximately 3 x 5 cm in size. This was likely the result of falling. No other significant gross lesions were observed.

Reproductive system: No significant gross lesions were observed.

Nervous system: Examination of the brain and cervical spinal cord revealed no significant gross lesions. No significant gross lesions were observed in the nerves of the distal front legs.

BACTERIOLOGIC EXAMINATION: Culture of the lung, liver, kidney, small intestine, and colon produced no significant bacterial isolates.

VIROLOGIC EXAMINATION: The fluorescent antibody test on pooled tissue samples was negative for equine herpes virus.

TOXICOLOGIC EXAMINATION: Tissue and fluid samples were obtained and held.

HISTOPATHOLOGIC EXAMINATION: Lung: The alveolar capillaries are congested. Brain, cervical spinal cord, heart, liver, kidney, adrenal gland, stomach, small intestine, colon, spleen, triceps muscle, semimembranosus muscle, left and right, lateral and medial palmar nerves, and left and right, lateral and medial (palmar) digital nerves: No significant microscopic changes were observed.

DIAGNOSIS: Multiple fractures, left and right metacarpophalangeal joints.

COMMENT: No pathology was found to indicate the occurrence of any other catastrophic event beside the fractured legs. No pre-existing bone pathology was observed.

BACTERIOLOGY

ANIMAL ID: 1: EIGHT BELLES, Equine, Thoroughbred, F, 3y
Sample Taken: 5-3-08 Completed: 5-9-08/12:59p

Sample: Tissue-Fresh

CULTURE-AEROBIC 5-9-08/12:59p

SPECIMEN	ORGANISM	QUANTITATION
Lung	No growth	
Liver	No growth	
Kidney	No growth	
Gut	Nonpathogenic bacteria	

TOXICOLOGY COMMENTS 5-7-08/11:20a (Continued)

TOXICOLOGY _____

ANIMAL ID: 1: EIGHT BELLES, Equine, Thoroughbred, F, 3y
Sample Taken: 5-3-08 Completed: 5-7-08/11:20a

Sample: Tissue-Fresh

TOXICOLOGY COMMENTS 5-7-08/11:20a

No toxicological testing has been requested at this time. Samples have been saved in case testing is requested in the future.

VIROLOGY _____

ANIMAL ID: 1: EIGHT BELLES, Equine, Thoroughbred, F, 3y
Sample Taken: 5-3-08 Completed: 5-6-08/3:25p

Sample: Tissue-Fresh

FA-EQUINE RHINOPNEUMONITIS 5-6-08/3:25p

Results: Negative